

'Nature Loop'

CONCEPT

Our proposal for the San Jose Light Tower Competition titled 'Nature Loop' takes its cues from the Guadalupe River that weaves its way across the city, from the Santa Cruz Mountains to the San Francisco Bay. A series of sinuous curved ramps gently rise on the western side of the site, making its way up to the 200' threshold. As the ramp ascends, it offers panoramic views of San Jose. The walkway is designed with living machines - plant-based low energy wastewater treatment system that mimics natural purifying mechanisms such as marshes and wetlands, on either side. Water from the Guadalupe River is pumped to the top of the Nature Loop and gently flows down to the base. As it does, it gets cleaned of e coli and other harmful bacteria that enters the river over its course. The clean water that collects at the base is then released back to the river creating an ecological loop.

'Nature Loop' not only fosters ecological sustainability but also social sustainability. The half mile trail will promote interaction between people and nature, elevated above the city plane. The winding walkways create a sense of drama and anticipation that culminates in spectacular views of the city. The deck at 190' will be a destination in the sky. We envision that 'Nature Loop' will not only become a landmark for San Jose but will also be a catalyst for an economic and cultural resurgence in the area.

HISTORY

The curvature of the ramps alludes to the original San Jose Light Tower that was created as a conical structure.

NET ZERO ENERGY :

A series of piezoelectric generators, embedded in pavers all across the site and under the walkway will harvest the energy from vibrations created from the foot traffic on site. The more people visiting the site, the greater the energy generation. We expect the visitor count will help produce enough energy to offset the electrical requirements for lighting and any other energy use.

LIGHTING :

A unique LED linear lighting scheme is proposed for the structures that follows and accentuates the contours of the curvilinear profile. The main lighting is set on the underside of the structure, thereby posing no issue in the flight path.

MATERIALS :

The ramps are supported on slender columns. Both structures are made from Glass Fiber Reinforced Concrete or GFRC, a sustainable building material with superior performance.

UNIVERSAL ACCESS:

The design will make use of innovative technology to provide motorized wheelchair access for patrons with disabilities, to traverse the ramps at their own leisure and pace.